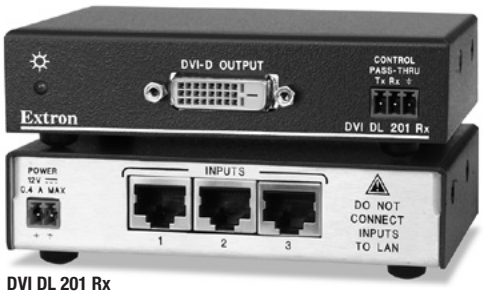
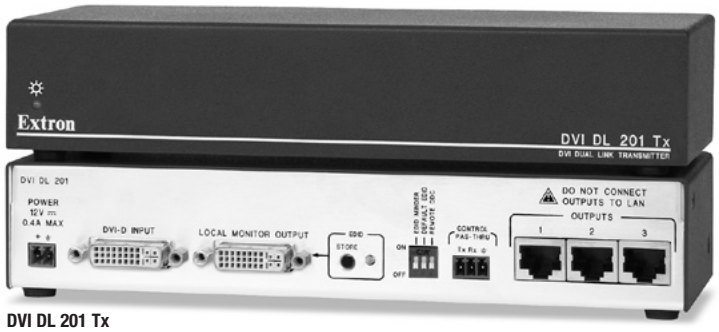
DVI DL 201

DUAL LINK DVI TWISTED PAIR EXTENDER WITH EDID MINDER®

- **Transmits dual link DVI-D and control signals over CATx cables**
- **Sends 2560x1600 signals over 100 feet (30 meters) with standard CAT 5e cable**
- **EDID Minder**
- **Automatic input cable equalization**
- **DVI input loop-through**
- **Supports EDID and HDCP transmission**
- **Bidirectional RS-232/IR pass-through**
- **Remote powering of receiver**



DVI DL 201 Rx



DVI DL 201 Tx

The Extron DVI DL 201 extender sends dual link DVI-D signals, plus bidirectional control signals up to 200 feet (60 meters) on three CATx cables. This HDCP-compliant extender set features EDID Minder®, automatic input equalization, and a buffered DVI loop-through output to support a local monitor for simplified PC integration. The DVI DL 201 maintains superior image quality throughout the system.

DESCRIPTION

The Extron **DVI DL 201** is a transmitter and receiver set that enables dual link or single link DVI signals to be carried over distances significantly beyond the capability of standard dual link DVI cables. Linked together using three economical and integration friendly CAT 5e, CAT 6, CAT 7, or Extron STP201 cables, the DVI DL 201 transmitter and receiver work together to send dual link or single link DVI-D signals up to 200 feet (60 meters). The DVI DL 201 is ideal for installations that require long distance digital video transmission and reliable presentation of high resolution graphics, including training, simulation, visualization, and command and control environments in medical, university, government, and other applications.

The DVI DL 201 features EDID Minder, which automatically manages EDID communication between the input source and the display, ensuring the source powers up properly and reliably delivers content to the display. Actively buffered DDC channels ensure EDID and HDCP information is passed to either the local or remote display. The DVI DL 201 is fully compatible with HDMI signals when used with the appropriate adapters from Extron.

Several features facilitate convenient, streamlined system integration. Automatic input equalization reduces the need for additional signal conditioning equipment by compensating for signal loss when using long input cable assemblies. The DVI DL 201 transmitter includes a DVI loop-through to support monitoring on a local display device. RS-232 or IR signals from a control system can also be transmitted over the same cabling as the DVI signals, providing remote control of a projector or flat-panel display. Additionally, either the transmitter or receiver can be remotely powered over this cabling, so that external power is necessary for only one of the devices.

The DVI DL 201 transmitter is housed in a 1U, half rack width enclosure, while the DVI DL 201 receiver is housed in a 1" (2.5 cm) high, quarter rack width metal enclosure allowing for a discreet, concealed installation. Both devices are also available separately.

DVID DL Pro Series
Dual Link DVI-D Male to Male Patch cables

FEATURES

- **Transmits dual link DVI-D and control signals over CATx cables** – Standard UTP/STP cables provide an economical, easily installed cable solution.
- **Sends 2560x1600 signals over 100 feet (30 meters) with standard CAT 5e cable**
- **Extron strongly recommends using individually shielded twisted pair cabling for optimal performance**
- **Extron STP201 Digital Twisted Pair cable provides added protection from outside interference and increases overall signal transmission distance**
- **EDID Minder automatically manages EDID communication between connected devices** – EDID Minder ensures that all sources power up properly and reliably output content for display.
- **Automatic input cable equalization** – Actively conditions incoming DVI signals to compensate for signal loss when using long DVI cables, low quality DVI cables, and source devices with poor DVI signal output.
- **DVI input loop-through** – The DVI DL 201 transmitter features a DVI-D output for connection to a local monitor.
- **Supports EDID and HDCP transmission** – DDC channels are actively buffered, allowing pass-through of EDID and HDCP information to either the local or remote display.
- **DDC routing to local or remote display**
- **Bidirectional RS-232/IR pass-through** – Bidirectional RS-232 control or IR signals can be transmitted alongside the video signal, so that the remote display can be controlled without the need for additional cabling.
- **Remote powering of receiver** – Only one power supply is necessary to power both devices.
- **LED indicator for source signal presence and power**
- **Fully supports HDMI signals when used with optional Extron HDMI-DVI adapters** – Supports HDMI embedded audio and CEC - Consumer Electronics Control signal transmission.
- **1U, half rack width metal enclosure - DVI DL 201 Tx, 1" (2.5 cm) high, quarter rack width metal enclosure - DVI DL 201 Rx** – With a low profile enclosure, the DVI DL 201 receiver can be discreetly installed above a projector or behind a flat-panel display.
- **Energy-efficient external universal power supply included with Tx models and Tx/Rx sets, part # 70-775-01** – Provides worldwide power compatibility, low power consumption, and reduced operating costs.

SPECIFICATIONS

NOTE: *Dual link DVI is backwards compatible with all single link DVI/HDMI signals.

VIDEO

Maximum data rate	10 Gbps (3.3 Gbps per color)
Maximum pixel clock	330 MHz (165 MHz per link)
Resolution range	Up to 2560x1600 @ 60 Hz
Formats	RGB and YCbCr digital video
Standards	DVI 1.0, HDMI

VIDEO INPUT AND LOOP-THROUGH — TRANSMITTER

Number/signal type	1 dual link DVI-D* input 1 dual link DVI-D* local loop-through
Connectors	2 DVI-I female (1 for input, 1 for loop-through)

INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER

Connectors	(3) RJ-45 per unit for 3 cables connecting the transmitter and receiver
Termination standards	TIA/EIA T568A or T568B
Signal transmission distance	
1920x1200 or 1080p @ 60 Hz	
Extron STP201 cable	Up to 150' (45 m)
2560x1600 @ 60 Hz	
CAT 5/5e/6 STP or Extron STP201	Up to 125' (38 m)
CAT 5/5e/6 UTP cable	100' (30 m)
	Longer distances are possible with lower rates.

NOTE: The transmission distance varies greatly depending on the signal resolution and on the type of cable, graphics card, and display used in the system.

NOTE: Shielded twisted pair cable provides added protection from outside interference and increases overall signal transmission distance. Extron strongly recommends using shielded twisted pair for optimal performance.

VIDEO OUTPUT — RECEIVER

Number/signal type	1 dual link DVI-D*
Connectors	1 DVI-I female

CONTROL/REMOTE — External device (pass-through)

Serial control port input	
Transmitter	RS-232 via (1) 3.5 mm, 3 pole captive screw connector
Receiver	1 set of proprietary signals on a female RJ-45 jack
Serial control port output	
Transmitter	1 set of proprietary signals on a female RJ-45 jack
Receiver	RS-232 via a 3.5 mm, 3 pole captive screw connector

NOTE: Protocol is mirrored between the transmitter and the receiver.

Serial control pin configurations	Captive screw connectors: 1 = Tx, 2 = Rx, 3 = GND

GENERAL

Recommended cable type	CAT 5/5e/6 (shielded or unshielded) or Extron STP201
Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 2 A, 24 watts
Power consumption	
DVI DL 201 Tx	8.1 watts, 12 VDC
DVI DL 201 Rx	9.4 watts, 12 VDC

NOTE: Each transmitter and receiver can be powered locally by an external power supply. The receiver can be powered remotely by a power supply connected to the transmitter on the other end of the CAT 5/5e/6 or Extron STP201 cable.

Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Convection, no vents
Mounting	
Rack mount	Yes, with optional 1U rack shelf
Furniture mount	Yes, with optional through-desk mounting kit
Pole mount	Attachable to a projector pole mount using optional mounting kit
Enclosure type	Metal
Enclosure dimensions	
DVI DL 201 Tx	1.75" H x 8.75" W x 3.0" D (1U high, half rack wide) 4.4 cm H x 22.2 cm W x 7.6 cm D (Depth excludes connectors.)
DVI DL 201 Rx	1.0" H x 4.3" W x 3.0" D (quarter rack wide) (2.5 cm H x 10.9 cm W x 7.6 cm D) (Depth excludes connectors.)
Product weight	Transmitter: 0.6 lbs (0.3 kg) Receiver: 0.3 lbs (0.1 kg) Transmitter and receiver: 0.9 lbs (0.4 kg)
Shipping weight	2 lbs (1 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety	CE, c-UL, UL
EMI/EMC	CE, C-tick, FCC Class A**, ICES, VCCI

NOTE: **FCC testing is conducted with STP (shielded twisted pair) cable.

MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE: All nominal levels are at ±10%.

Model	Version Description	Part number
DVI DL 201 Tx/Rx	Transmitter/Receiver Set	60-957-01
DVI DL 201 Tx	Transmitter	60-957-12
DVI DL 201 Rx	Receiver	60-957-13

Optional Accessories

DVID DL Pro Series
Dual Link DVI-D Male to Male Patch Cables

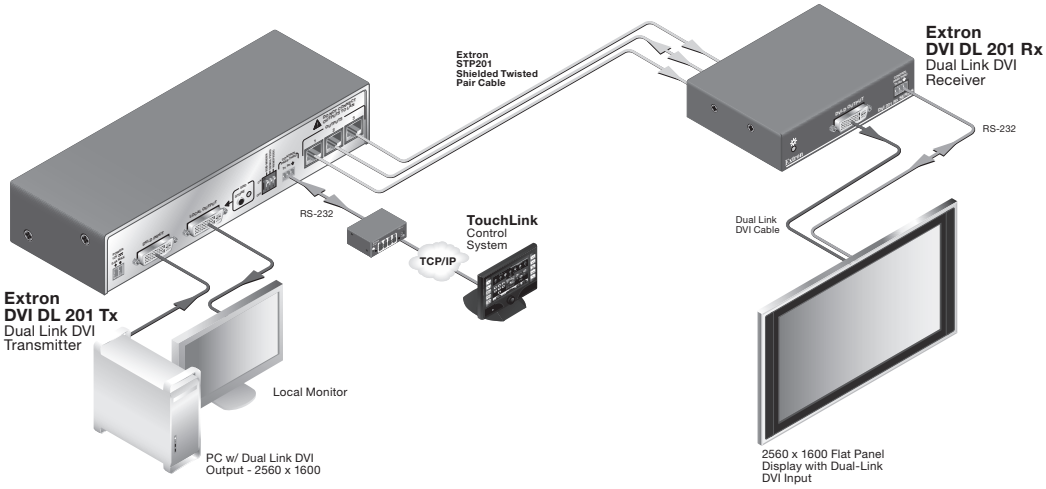
DVID DL Pro/3	3' (90 cm)	26-651-03
DVID DL Pro/6	6' (1.8 m)	26-651-06
DVID DL Pro/12	12' (3.6 m)	26-651-12

DVID SL Pro Series
Single Link DVI-D Male to Male Patch Cables

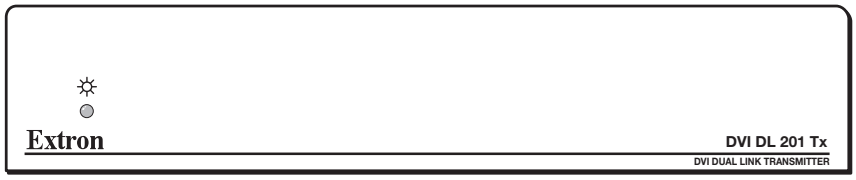
DVID SL Pro/3	3' (90 cm)	26-649-03
DVID SL Pro/6	6' (1.8 m)	26-649-06
DVID SL Pro/12	12' (3.6 m)	26-649-12

HDMIF-DVIDM	HDMI Female to DVI-D Male Adapter	26-616-01

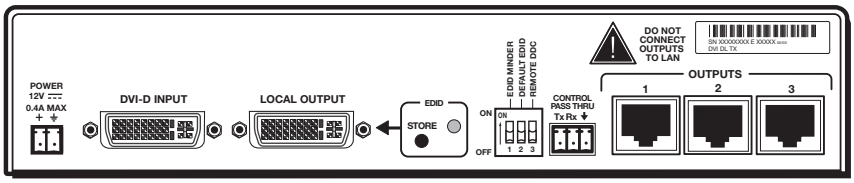
APPLICATION DIAGRAM



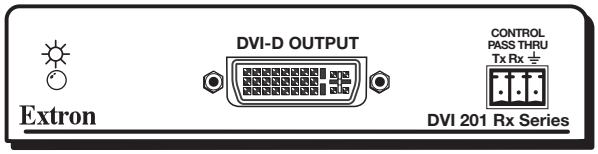
PANEL DRAWINGS



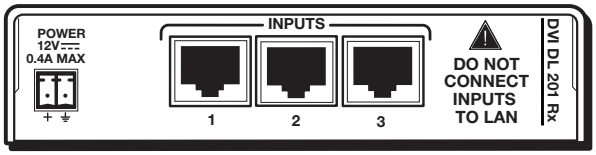
DVI DL 201 Tx - Front



DVI DL 201 Tx - Back



DVI DL 201 Rx - Front



DVI DL 201 Rx - Back

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Inside Europe
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ASIA
+800.7339.8766
Inside Asia
+65.6383.4400

MIDDLE EAST
+971.4.299.1800

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